

Windows Server 2022: Implement Disaster Recovery

Manage Backup for Windows Server



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Overview



Back up and restore files and folders to Azure Recovery Services vault

- Work with backup policies

Install and manage Azure Backup Server

- Back up and recover workloads



Windows Server 2022: Implement Disaster Recovery

Manage Backup for Windows Server

Manage Recovery for Windows Server

Implement Disaster Recovery by using Azure Site Recovery

Protect Virtual Machines by Using Hyper-V Replicas



Windows Server Hybrid Administrator Associate

Take two exams



CERTIFICATION EXAM **AZ-800**
**Administering Windows Server
Hybrid Core Infrastructure**

AND



CERTIFICATION EXAM **AZ-801**
**Configuring Windows Server
Hybrid Advanced Services**

Earn the certification

















ASSOCIATE CERTIFICATION
**Microsoft Certified:
Windows Server Hybrid
Administrator Associate**

One-year cert validity



Exercise Files



What do you want to learn?

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Troubleshooting with Microsoft Azure Network Watcher

by Tim Warner

Microsoft now gives you packet-level access to your Windows Server and Linux virtual machines (VMs) running in Azure. You'll learn how to use Network Watcher to troubleshoot network security groups (NSGs), perform packet captures, and much more.

[Resume Course](#) [Bookmark](#) [Add to Channel](#)

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Learning Check

Recommended

These exercise files are intended to provide you with the assets you need to create a video-based hands-on experience. With the exercise files, you can follow along with the author and re-create the same solution on your computer. We find this to be even more effective than written lab exercises.

[Download exercise files](#)

Course author

**Tim Warner**

Timothy Warner is a Microsoft Most Valuable Professional (MVP) in Cloud and Datacenter Management who is based in Nashville, TN.

Course info

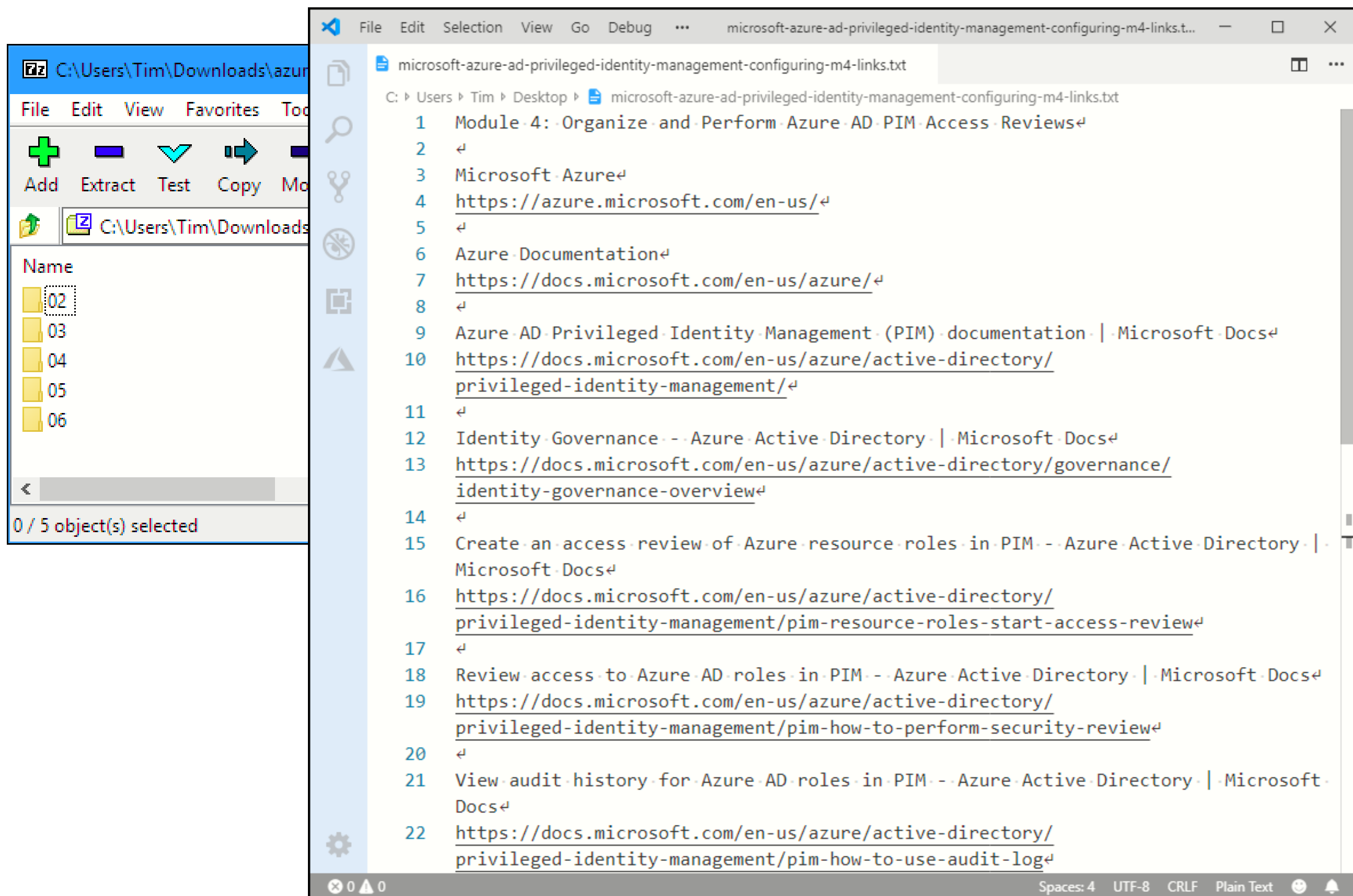
Level	Intermediate
Rating	★★★★★
My rating	★★★★★
Duration	2h 12m
Released	31 Oct 2017

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Exercise Files



Azure Recovery Services Vault



Recovery Services Vault



Cloud-hosted, hybrid/multi-cloud aware backup and replication solution

All storage is managed by Microsoft

Soft Delete with 14 day retention

Cross Region Restore

Backup data protected by:

- Platform-managed keys
- Customer-managed keys



Recovery Services Vault



RS vault must be in same region as the Azure VMs you want to back up

Supports Azure Disk Encryption for Windows and Linux VMs in Azure

Native integration with Azure Resource Manager

- Role-based access control (RBAC)
- Azure Monitor/Log Analytics

Backup Policies

Templates

VM
File share
SQL Server
SAP HANA

Backup schedule/retention range

Daily, weekly,
monthly, yearly
backup points

Instant Restore

Shorten restore
window by keeping
1-5 days' worth of
snapshots local



Snapshot Consistency Levels

1ST

Application: Include memory content and pending I/O. Scripts needed for Linux VMs

2ND

File-system: Default for Linux VMs. May require data "fix up"

3RD

Crash: No SLA. Occurs when VM is stopped and deallocated



Backup Vault



Leaner cloud-hosted backup solution with no replication engine

Supported workloads:

- Azure Disks
- Azure Blobs
- Azure Database for PostgreSQL servers



Demo



1

Onboard Azure VMs

Portal: VM creation

Portal: RS vault

Dev: JSON template

Backup policies

Run ad-hoc VM backup



Azure Backup Server



Microsoft Azure Recovery Services (MARS) Agent



Extension to built-in Windows Server Backup (wbadmin)

Appropriate for one-off, single server backups to Azure Recovery Services vault

Supported workloads:

- Files and folders
- Volumes
- System State

Azure Backup Server (MABS)



Free, scaled-down edition of Microsoft System Center Data Protection Manager (DPM)

Supported scenarios:

- "Bare metal" backup
- SQL Server
- Exchange Server
- SharePoint Server
- Hyper-V VMs
- VMware VMs



Demo



2

Review MABS installation

Run workload backup to RS vault



Summary



The Recovery Services vault provides a "one-stop shop" for server backup

- Locally
- In Azure
- In other clouds

What about recovery?



Up Next:

Manage Recovery for Windows Server

